DOCUMENT RESUME

ED 399 971 IR 056 114

AUTHOR Lindsay, Lorin
TITLE Web Page Design.
PUB DATE 96
NOTE 9p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer System Design; Decision Making; *Design Preferences; Guidelines; Information Sources; Internet; Standards; Strategic Planning; User Needs (Information); *World Wide Web
IDENTIFIERS *Home Pages; HTML

ABSTRACT

Designing a web home page involves many decisions that affect how the page will look, the kind of technology required to use the page, the links the page will provide, and kinds of patrons who can use the page. The theme of information literacy needs to be built into every web page; users need to be taught the skills of sorting and applying information to their individual needs. Web page design should involve: (1) planning ahead and writing a style sheet to define the who, what, and how of the pages; (2) keeping the pages simple; (3) designing the pages for fast use and allowing the user to have a choice between text and graphics; (4) making the pages readable; (5) showing the interdisciplinary and hierarchical nature of information and knowledge; and (6) keeping the links up-to-date. While HTML programming does not define the document structure as desktop publishing, the time is quickly coming when the principles of desktop publishing will be used in web publishing. The web designer who wants to design a web page that all browsers can use will use the HTML2 standard. There are resources designed to help with a home page and to evaluate information on the Internet for use when designing web pages. Two such resources are highlighted, as well as a sample of the Peru State College Library (Nebraska) home page. (AEF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 399 971

Web Page Design

Lorin Lindsay
Peru State College Library

Designing a web home page is more than just writing some HTML and putting it out for patrons to use. Many decisions have to be made that effect how the page will look, the kind of technology required to use the page, the links the page will provide, and kinds of patrons who can use the page. The pages will need a consistent look, feel and way of navigating.

The Internet is a mirror of society with all of its glory and glamour as well as its warts and wrinkles. Media attention makes the Internet and web pages sound wonderful and desirable. Yet security leaks, resources that might offend, slowness and URLs that change are some of the sharks swimming the Internet that page design must address.

"The greatest problem of the information age is that there's too much information.[i]"

The amount of information descending upon us is like a giant dust storm about to bury us. Another way to think of it is that we are being hit by the shrapnel of the information bomb as it explodes. The 1850 Harvard College catalog stated we could learn all there was to know about science in four years. Today the amount of information we have to sort through is doubling every 18 to 24 months. By the year 2020 it is projected the information we have to handle will double every 73 days or 5 times a year[ii]. The web page will become the principle medium to handle this information because conventional printing will not be able to keep up. Recently, Borge Sorensen, director of the Copenhagen Public Libraries, said, "The new library will not be judged by its collections but by its potential for connecting users with information.[iii]"

The theme of information literacy needs to be built into every web page. Users need to be taught the skills of sorting and applying information to their individual needs. They need to know what information is needed, how to find it, how to evaluate it, how to use it effectively, and how to keep learning. "They are people prepared for lifelong learning, because they can always find the

IR056114

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Lorin Lindsey
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

information needed for any task or decision."[iv] Resources, such as Critical Thinking http://www.prenhall.com/list/hp0301.html, need to be designed into each home page. The web page should promote lifelong learning.

When users come to a web page, they want to find information quickly. They ask several questions, such as what is this for or how can I get what I want. They need to know when they go to the links on a web page if they are going to another web page, a gopher, a WAIS or to a FTP site. Some users will need help screens to teach them how to use these different sites.

When a user comes to the web page, several things are out of the control of the library. First, what kind of equipment does the user have? If the user is using an 286 instead of a Pentium, all the web graphics are useless. If the user is using a 2400 baud modem, it could take forever for the graphics to load. It would be click, go wash the dishes. Click and go take a shower. Click and watch the late news. Then click and use the web page. Second, what kind of browser does the user have? If the browser is a lynx, character based, the graphics show up as [image] on the screen. Third, is the user visually handicapped? The equipment they use do not read graphics. To see what is required for disabled users go to the National Center for Accessible Media at http://www.wgbh.org/ncam. Fourth, the browser type is unknown. To make sure the web page is displayed properly, check the web page on the major browsers.

So much of what is happening on the Internet and web page development comes from outside the library community. Librarians need to apply the organizational skills developed over the last century to the Internet. An example of what librarians can do comes from an email message to Nettrain from Ian Winship, Information Services Department, University of Northumbria at Newcastle, City Campus Library, Newcastle upon Tyne, NE1 8ST, UK, ian.winship@unn.ac.uk. Ian gave the URL for a Web Search Tool Features at http://unn.ac.uk/features.htm. Karen Schneider in her article about Java said, "...if we learned anything in the last decade, it's that ignoring a technological development doesn't make it go away."[v]

Given there are some things out of the control of web design, most of what happens is by design. First, plan ahead and write a style sheet to define the who, what, and how of the pages. Second, keep the pages simple so they are easy to use and navigate. Third, design the pages for fast use. Design the page for the lowest common denominator. Design the page to give the user a choice between text and graphics. Design the page to load fast. Fourth, make the pages readable. Forget fancy visual effects if they get in the way of navigation and the message. Fifth, show the interdisciplinary and hierarchical nature of information and knowledge. Sixth, keep the links up-to-date because nothing frustrates the user faster than stale links that go nowhere.

Many home page creation resources exist on the Internet to assist web page design. The Peru State College Library home page has resources listed under "Home Page Design and Resources" at http://www.peru.edu/~lindsay/home.html. The following are good sources.

1. Creating Net Sites - Netscape
   http://home.netscape.com/assist/net_sites/index.html

2. Guide to Web Design - Sun Microsystems
   http://www.sun.com/styleguide/

3. Page Design and Layout - Yahoo
   http://www.yahoo.com/Computers_amd Internet/Internet/
   World_Wide_Web/Page_Design_and_Layout

4. Web Design Tutorial
   http://www.msg.net/tutorial/

5. Web Developers' Virtual Library
   http://WWW.Stars.com/Vlib/

6. WebMaster Reference Library
   http://webreference.com

7. Writing For The Web - A Primer For Librarians
   http://bones.med.ohio-state.edu/eric/papers/primer/webdocs.html

8. World Wide Web "How-To's" From Library of Congress
   http://lcweb.loc.gov/global/www.html

9. WWW Consortium Page
http://www.w3.org/

Before designing the page, a number of decisions need to be made. Probably the decision will already be made as to which browser will be used by the college/university. First, what is the purpose of the web site? Second, how will the site be organized? Third, what is the logo or graphic to be used on each page? Fourth, what are the basic elements to be used on each page? Fifth, what are the graphics and photos to be used? Sixth, what forms will be used for user response? Seventh, how will the page be tested in different browsers? Eighth, how will the site be maintained and updated? As these questions are answered, a style guide for the web site will be created. Also the style guide will include basic information such as headers, footers, name, link to topmost page, navigation bars and icons, rule lines, type font and emphasis, heading tags, and which html to be used. A good resource for web page style sheets is http://www.w3.org/hypertext/WWW/Provider/Style/Overview.html. The basic page elements include page title, top of page graphic, page background, text, last update for page, URL address of Web site, links, and page author.

When the library is asked to write standards and policies for web use, turn to CAUSE Library Resources at http://cause-www.colorado.edu. CAUSE is an association for managing and using information resources in higher education with more than 1,300 colleges and universities in the U.S. and abroad. Members have contributed polices on access, censorship/free speech, government regulation, copyright/intellectual property, ethical use, privacy, and the World Wide Web.

> "Virtually all CAUSE members are learning to deal with the explosive growth of networking, connecting every part of the campus community and linking to colleagues and information resources across the country and around the world."[vi]

Because Internet resources are exploding and changing so fast, finding resources to include on the web page can be frustrating. Periodicals, such as Internet World, Info To Go, and popular

computer magazines, provide URLs to resources. NetFirst from OCLC on FirstSearch is a good resource. Search engines, such as Alta Vista, search the Internet for resources, which can prove to be overwhelming at times. Lynx Of The Week List at http://web-star.com/lotw/lotw.html and Scout Report at http://rs.internic.net/scout/report are good sources for weekly updates.

The article, "Guidelines for Internet Resource Selection[VII]," provides good guidelines for resource selection. An email message on Nettrain from Rowan Brownlee, CD-ROM Librarian, General Reference Library, State Library of New South Wales, Macquarie St. Sydney NSW 2000, Australia, rowanb@ilanet.slnsw.gov.au provided the following list of Internet resources for evaluating Internet information.

1. Thinking Critically About World Wide Web Resources
   http://www.ucla.edu/campus/computing/bruinonline/trainers/critical.html

2. Evaluating Quality on the Net
   http://challenge.tiac.net/users/hope/findqual.html

3. How to Critically Analyze Information Sources
   http://urisref.library.cornell.edu/skill26.htm

4. Clearinghouse: Information: Ratings System
   http://www.lib.umich.edu/chouse/docs/ratings.html

5. General Internet Resource Finding Tools
   http://lib-www.ucr.edu/pubs/navigato.html

HTML (HyperText Markup Language) is a presentation independent language that concentrates on document structure, not appearance. Tags define the structure of the document, and tags provide meaning for the text with headings, boldness, paragraph tags, etc. With desktop publishing, the document is fine tuned so that unity, consistency, contrast, proportion, rhythm, direction, balance, and restraint provide the desired document impact. While HTML programming does not define the document structure as desktop publishing, the time is quickly coming where the principles of desktop publishing will be used in web publishing. For instance, True Type fonts are being added to several web browsers. The problem right now is that not all of the web browsers

will display html the same way.

The web designer who wants to design a web page that all browsers can use will use the HTML2 standard. The web designer who wants to develop pages with the proposed HTML3, Netscape extensions, and Java will design pages not all browsers can view. One way around this dilemma is to state "This page designed for (Netscape) browser" and also have another page for a character based browser, such as Lynx. A good starting point to learn HTML and to know which standard to follow is the book, "Teach Yourself Web Publishing With HTML In 14 Days[viii]"

The following is a sample of the Peru State College Library home page at http://www.peru.edu/~lindsay/library.html.

Peru State College Library

PSC Library Catalog
Full-Text Demonstration Project
Academic Fields/Disciplines
Chronicle of Higher Education
Current News, Sports & Politics
E-journals by Academic Discipline
Electronic Reserve Room
Home Page Design and Resources
Job Resources Online
LISTSERV Finding Aids
Nebraska Resources
Style Guides For Electronic Resources
Web Starting Points and Search Engines

Return To PSC Home Page

The HTML for the preceding example follows. Note that files, such as news.html, refer to another file that contains the URL links to the various resources.

```
<html>
<head>
<title>Peru State College Library</title>
</head>
<body>
<hr>
<ul>
<li><a href=telnet://nscs.peru.edu>PSC Library Catalog</a>
<li><a href=fulltext.html>Full-Text Demonstration Project</a>
<li><a href=fields.html>Academic Fields/Disciplines</a>
<li><a href=chronicle.html>Chronicle of Higher Education</a>
<li><a href=news.html>Current News, Sports & Politics</a>
<li><a href=ejour.html>E-journals On-Line by Academic Discipline</a>
<li><a href=home.html>Home Page Design and Resources</a>
<li><a href=jobs.html>Job Resources Online</a>
<li><a href=listserv.html>LISTSERV Finding Aids</a>
<li><a href=nebraska.html>Nebraska Resources</a>
<li><a href=style.html>Style Guides For Electronic Resources</a>
<li><a href=webindex.html>Web Starting Points and Search Engines</a>
<hr>
<li>a href=http://www.peru.edu/index.html>PSC Home Page</a>
</ul>
</body>
</html>
```

The following is a sample of some of the links from news.html mentioned above.

```
<h2>Current News:</h2>
<li><a href=http://www.cnnfn.com/>Cable News Network Financial Network</a>
<li><a href=http://www.cnn.com>CNN Home Page</a>
<h2>Sports:</h2>
<li><a href=http://espnet.sportszone.com/>ESPN</a>
<h2>Politics, Primaries & Elections:</h2>
<li><a href=http://www.washtimes-weekly.com>Washington Times Weekly</a>
```

Summary:

Designing a web home page is more than just writing some HTML and putting it out for patrons to use. Many decisions have to be made, such as how will the page look, what technology will users have to use, and what kinds of links will be provided. As decisions are being made about the home page, go to the resources designed to help with a home page and designed to evaluate information on the Internet. Write a web style manual and decide which version of HTML will be

used. With information exploding around us, users need to be taught how to use information, and this should be designed into the home page.

---

[i] Fallows, James, "Navigating the Galaxies," Atlantic Monthly, April 1966, p. 104
[ii] Breivik, Patricia & Dan L. Jones, "Information Literacy," Liberal Education, Winter 1993, p. 24
[iii] "Libraries Ponder Role In The Digital Age" by William Grimes, New York Times, April 29, 1996, p. B1, column 1
[iv] Green, Kenneth & Steven W. Gilbert, "Great Expectations" Change, March/April 1995, MasterFILE FullTEXT 1000, paragraph 51
[v] Schneider, Karen G., "Java: The Third Wave of the Internet" American Libraries, February 1996, p. 60
[vi] http://cause-www.colorado.edu/issues/policy.html, paragraph 1
[vii] Pratt, Gregory F. Patrick Flannery, and Cassandra L. D. Perkins, "Guidelines for Internet Resource Selection" C&RL News, March 1996, p. 134-135
[viii] Lemay, Laura, Teach Yourself Web Publishing With HTML In 14 Days, sams.net, 1995